

REMARKS

Applicant expresses appreciation to the Examiner for consideration of the subject patent application. This amendment is in response to the Office Action mailed February 9, 2005.

Claims 1 and 41 were rejected. The drawings have been amended to address the concerns raised by the Examiner.

Claims 1-68 were originally presented. Claims 34-40 were previously cancelled. Claims 2-33 and 42-68 are withdrawn from consideration. It is noted that upon allowance of a generic claim, Applicant is entitled to consideration of claims to additional species. Particularly claims 2-18, which are dependent on generic claim 1, and claims 42-64, which are dependent on generic claim 41.

Drawing Objections

The drawings were objected to for showing an incorrect callout number in Figure. 3c. Therefore, as shown on the enclosed replacement sheet, Figure 3c has been amended, without adding new matter.

Claim Rejections - 35 U.S.C. § 102

Claims 1 and 41, both independent claims, were rejected under 35 U.S.C. § 102(b) as being anticipated by Busch-Vishniac et al. (US 4,429,193) (hereinafter "Busch").

The Office Action states that Busch discloses a speaker device comprised of a rigid emitter plate (90 and 94) having an outer face oriented outward (the top of 90 toward 98) and an inner face (96 facing 94), said emitter plate having a plurality of apertures extending between the outer and inner faces; a thin piezoelectric film (92) disposed across the apertures of the emitter plate. However, this characterization of Busch is misleading. The disclosure in Busch is substantially different from the invention claimed in claims 1 and 41.

Busch does not disclose an emitter plate. Rather, Busch discloses an electret transducer comprised of an electret foil 92. The electret foil 92 is an electrostatic diaphragm. An electrostatic diaphragm is modulated by electrostatically repelling and attracting the diaphragm. In Busch the electret foil 92 is attracted to and repelled from the back plate 94. (Col. 6, Lines 54-

Drawing Amendments

The attached sheet of drawings includes changes to FIG. 3c. This sheet, which includes FIGs. 3c and 3d replaces the original sheet containing FIGs. 3c and 3d.

Attachment: Replacement sheet.

62) An electrostatic potential difference of several hundred to thousands of volts is typically required to attract and repel the diaphragm. (Busch, Col. 2, lines 26-30). In contrast, a piezoelectric film can be directly modulated using tens of volts or less. Applying several thousand volts to a piezoelectric film would likely cause the film to fail. A piezoelectric film is not disclosed in Busch.

Further, there is no mention of any pressure means in Busch. No means for applying external pressure is shown or discussed. The Office Action states that the form of the foil, as shown in FIG. 8 of Busch shows that pressure is applied. However, gravity and/or adhesive can enable the foil to take the form shown in FIG. 8. Further, internal pressure within the transducer shown in Busch may act to bloat the foil and/or interfere with the electrostatic operation of the electret transducer as disclosed. Therefore, there is no need for a pressure means in Busch.

In contrast, independent claim 1 sets forth, in part:

a thin **piezoelectric film** disposed across the apertures of the emitter plate; ...
pressure means coupled to the emitter plate for developing a biasing pressure with respect to the thin film at the apertures to distend the film into an arcuate emitter configuration capable of constricting and extending in response to variations in the applied electrical input at the piezoelectric film to thereby create a compression wave in a surrounding environment.

Independent claim 41 is substantially similar to claim 1 and the same arguments that apply for claim 1 also apply for claim 41. Further, Busch does not disclose a positive biasing pressure, as claimed in claim 41.

Therefore, Applicant respectfully submits that claims 1 and 41 are allowable, and urges the Examiner to withdraw the rejection.

Double Patenting

Claims 1 and 41 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of US Patent No. 6,011,855. A terminal disclaimer is attached to overcome this rejection. The present application and US Patent No. 6,011,855 are commonly owned.

CONCLUSION

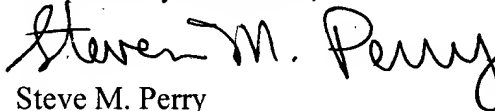
In light of the above, Applicant respectfully submits that pending claims 1 and 41 are now in condition for allowance. Therefore, Applicant requests that the rejections and objections be withdrawn, and that the claims be allowed and passed to issue. If any impediment to the allowance of these claims remains after entry of this Amendment, the Examiner is strongly encouraged to call Steve Perry at (801) 566-6633 so that such matters may be resolved as expeditiously as possible.

No claims were added. Therefore, no additional fee is due.

The Commissioner is hereby authorized to charge any additional fee or to credit any overpayment in connection with this Amendment to Deposit Account No. 20-0100.

DATED this 9th day of May, 2004.

Respectfully submitted,

A handwritten signature in black ink that reads "Steve M. Perry". The signature is fluid and cursive, with the first letters of each name being capitalized and prominent.

Steve M. Perry
Registration No. 45,357

THORPE NORTH & WESTERN, LLP
Customer No. 20,551
P.O. Box 1219
Sandy, Utah 84091-1219
Telephone: (801) 566-6633